



## **INDONESIA: ENERGY HIGHLIGHTS APRIL/MAY 2005**

### **Summary**

- The Government of Indonesia (GOI) announced additional incentives on April 25 to develop marginal oil fields in an attempt to boost Indonesia's flagging oil production.
- An Indonesian-U.S. consortium plans to begin construction of Indonesia's first privately owned refinery in South Sulawesi by the end of 2005.
- The GOI signed three gas supply agreements, including two for PLN gas-fired power plants in Java and Sumatra.
- Gas supply disruptions have threatened rotating blackouts on Java, while power demand has increased following the GOI's March 1 fuel price hikes.
- State-owned joint venture Geo Dipa Energy won a controversial tender for the Sarulla geothermal power plan in North Sumatra.
- Indonesia hopes to increase coal and natural gas use under the latest national energy plan.
- Pertamina experienced severe cash flow problems in April and May over delayed fuel subsidy reimbursements from the Government of Indonesia (GOI).

### **Additional Incentives for Marginal Fields**

The Energy Ministry issued Ministerial Decree 8/2005 on April 25 for developing marginal oil fields, in an effort to boost crude oil production. Under the new regulation, production sharing contractors (PSCs) will now be able to claim 120 percent cost recovery for fields with an estimated rate of return of less than 15 percent. This is a 20 percent increase from previous cost recovery regulations. The incentive is subject to removal once the rate of return exceeds 30%. So far, eight PSCs operating a total of 30 marginal fields qualify for the incentive – U.S. Caltex, Anglo-American BP, Kondur, Bumi Siak Pusako-Pertamina, Medco Energi Internasional, Energi Mega Persada (EMP), the Chinese National Offshore Oil Corporation (CNOOC), and Premier Oil. The



government is also evaluating development incentives for brownfield projects and marginal gas fields. The GOI hopes the policy change will stimulate additional exploration and raise crude oil production from the current 960,000 barrels/day to the target 1.25 million barrels/day.

## New Oil Refinery in Sulawesi?

Local firm PT Intanjaya Agromegah Abadi (IAA) and its joint venture partner, Texas-based Inter Global Technologies (IGT) are slated to begin construction of the country's first privately-owned refinery by the end of 2005. The Parepare oil refinery in South Sulawesi was initially licensed nine years ago, but development stalled during the 1997-98 economic crisis. IAA holds 30% stake in PT Kilang Minyak Nusantara, owner of the proposed refinery, while IGT holds the remaining 70%. Total cost of the project is an estimated \$3.5 billion, with a capacity of 300,000 barrels per-stream day (BSPD). The refinery expects to start production in 2010. According to the Energy Ministry, Indonesia needs about \$15 billion in refinery investment over the next four years in order to reduce the country's growing reliance on fuel imports (25 percent of consumption currently). Domestic demand for fuel is increasing by 7 percent annually, but refining capacity has remained stagnant for the last decade.

## Gas Supply Contracts Signing

State-owned power company PLN and three production sharing contractors signed Gas Sales and Purchase Agreements (GSPA) on May 17. The contracts have a total volume of 500 trillion British Thermal Units (BTU) and are reportedly valued at \$1.4 billion. The three contractors are Malaysia's Petronas, local firm Kalila Bentu and Petrochina, which will supply gas from the Muriah, Korinci Baru and Salawati fields respectively. The contract helps PLN secure gas supplies for two power plants in Central Java and Central Sumatra, and to reduce operating costs by increasing its natural gas use.

**Table 1: PLN Gas Sales and Purchase Agreements**

Supplier	Buyer	Years	BBTU/day	Total (TBTU)	Price (\$/MMBTU)
Petronas Carigali Muriah Ltd	PLN (Tambak Lorok, Central Java)	10	145.0	346	2.78
Kalila (Bentu) Operator Pty Ltd	PLN (Pekanbaru)	15	15.0	146	2.65
PetroChina International (Bermuda) Ltd	Henrison Iriana, PT	5	1.2	2	2.75

*Note: PT Henrison Iriana is a plywood company based in Papua.*



State-owned petroleum company Pertamina and state-owned gas distributor PGN signed a Memorandum of Understanding (MoU) with the city of Jakarta to supply compressed natural gas (CNG) for public transport vehicles in the capital. Under the MoU, Jakarta will begin fueling public vehicles with CNG, as mandated by City Law 2/2005 on air pollution controls. The law is supposed to become fully effective by February 2006; however, a number of hurdles remain. According to the City Environmental Management Body, there is no clear estimate yet of the number of CNG gas stations and the volume of CNG needed to comply with Law 2/2005. The city's gas transmission network is also insufficient to support the necessary distribution requirements. Besides the technical obstacles, analysts believe city administrators will face challenging in successfully socializing greater use of the more expensive CNG transport with the public.

## **Blackouts Threaten Java and Bali**

PLN announced that new gas pipeline construction from BP's Offshore Northwest Java (ONWJ) fields would temporarily disrupt gas supplies to the Muara Karang and Tanjung Priok power plants in Central Java, precipitating rolling blackouts for the period May 23-June 8. The new ONWJ pipeline resulted in an average power supply decrease of 400 megawatts (MW), greater than the reserve margin generally available on the Java-Bali grid. The state-owned utility asked customers to reduce power consumption by switching off at least 2 light bulbs or unnecessary electrical equipment during the peak hours of 5pm to 10pm. The plea for energy conservation has worked; according to PLN it has observed an average 300 MW lower household demand during these hours.

Peak loads on the Java-Bali grid (which accounts of 80 percent of Indonesia's power demand) have increased an average 100 MW per month of late, reaching a record high of 14,821 MW in April. The GOI has attributed the increase, in part, to additional demand from the industrial sector. Over the last several years, industries have relied upon their own generators as a more reliable power supply than PLN. However, since the government raised subsidized fuel prices an average 25 percent on March 1, it has become more costly for industries to use their own fuel oil generators and they are switching back to the Java power grid. PLN hopes that an additional 2700 MW in planned power capacity (Cilegon, Cilacap and Tanjung Jati B plants) in 2006 will alleviate the problem. With the advent of the dry season and reduced hydropower availability, however, PLN expects continued power supply challenges over the coming months.



## **Geo Dipa Wins Sarulla Power Tender**

PLN's Tender Committee selected PT Geo Dipa Energy, a joint venture of PLN and Pertamina, to develop the 300 MW Sarulla geothermal power plant in North Sumatra on May 23. The other short-listed candidate was a consortium of local petroleum company PT Medco Energy International, U.S. Ormat and Japan's Itochu. PLN holds a 33 percent interest in Geo Dipa, which is currently developing geothermal projects in Dieng and Patuha, Central Java. PLN's decision to award the contract to a firm in which it holds a share raised concerns over conflict of interest and the transparency of the power tendering process. Industry analysts have called for an independent regulator and have voiced concern that the absence of clear, rule-based tendering guidelines will hurt Indonesia's ability to attract foreign investors and financiers to the power sector. The Energy Ministry is finalizing a new Electricity Law to replace Law 20/2002, which was annulled by Indonesia's Constitutional Court in December 2004.

## **Coal and Gas as Main Energy Sources**

In May 2005, the GOI announced a "Blueprint for National Energy Management" that outlines plans to increase coal, natural gas and other renewable energies in the national energy mix. Under the blueprint, coal and natural gas use should reach 31 percent and 33 percent, respectively, by 2025. Currently, coal comprises of only 14 percent of the total national energy mix, while natural gas accounts for 26 percent. This policy is necessary for Indonesia to reduce its dependency on fuel oil, which currently comprises about 54 percent of the national energy mix. However, in the power sector coal already comprises roughly 40 percent of the total energy mix, while natural gas accounts for just 19 percent and oil 30 percent.

Indonesia has abundant coal and gas reserves, estimated at 150 years and 60 years, respectively. To further stimulate coal development, the GOI is considering fiscal incentives and developing coal bed methane and mine mouth power. In the natural gas sector, creation of a robust pipeline network is the key to developing the domestic gas market. PGN plans to tender two principal gas pipelines for Java this summer as part of that effort.

## **Pertamina Cash Flow Problems Hurt Fuel Stocks**

Delayed fuel subsidy disbursements from the government caused cash flow problems for Pertamina in April and May 2005, disrupting fuel imports and reducing the national fuel stock to critical status. At one stage, Pertamina's fuel stock had dropped to 19 days, below the safety level of 20 days. Pertamina imports 25 percent of Indonesia's fuel needs at market prices, but sells them to end users at subsidized prices. According to the Energy Ministry, the GOI owes Pertamina \$2.5 billion for fuel subsidy



reimbursements dating back to 2003. On May 10, the GOI reimbursed \$347 million to the cash-strapped company to cover oil product procurements for January to May 2005, and plans to make regular disbursements to Pertamina of \$126 million per month beginning in June. This may not be enough -- at current international crude prices, the Energy Ministry estimates monthly fuel subsidy costs of \$842 million. Cash flow problems have prevented Pertamina from paying back bank letters of credit worth over \$950 million, affecting its ability to receive new letters of credit for importing oil products.